
TODD COUNTY

(Todd County Water Service Area Map)

- Estimated 1999 population of 11,200--95% on public water
- Estimated 2020 population of 11,100--100% on public water
- 270 miles of water lines, with plans for 190 additional miles of lines
- Estimated funding needs for public water 2000-2005--\$3,351,000
- Estimated funding needs for public water 2006-2020--\$1,904,000

Todd County had an estimated population of 11,165 (4,577 households) in 1999 with a projected population of 11,150 (4,855 households) in 2020. Public water is provided to 4,600 customers, or over 95 percent of the county's residents. In areas of the county not served by public water, about 5 of 6 percent of the households rely on private domestic wells and 1 of 6 percent rely on other sources. An additional 250 households are expected to be served by new line extensions by 2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
TODD								-
Todd Co. W/D	121	44	678			252	1,200	2,130
Elkton			295					295
Trenton	23	50	379	247			300	926
TOTAL	144	94	1,352	247		252	1,500	3,351

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
TODD								-
Todd County W/D	47	Est. 155	1,404				500	1,904
Total	47	155	1,404				500	1,904

PUBLIC WATER SYSTEMS

The residents of Todd County are currently served by four water systems: the Todd County Water District, the City of Elkton, City of Guthrie, and the City of Trenton. In addition, the South Logan County Water District serves approximately 75 households in Todd County, while the Todd County Water District serves 350 households in Logan County. Also, of particular significance, it should be noted that Todd and Logan Counties have

WATER SERVICE AREAS

TODD COUNTY

Kentucky

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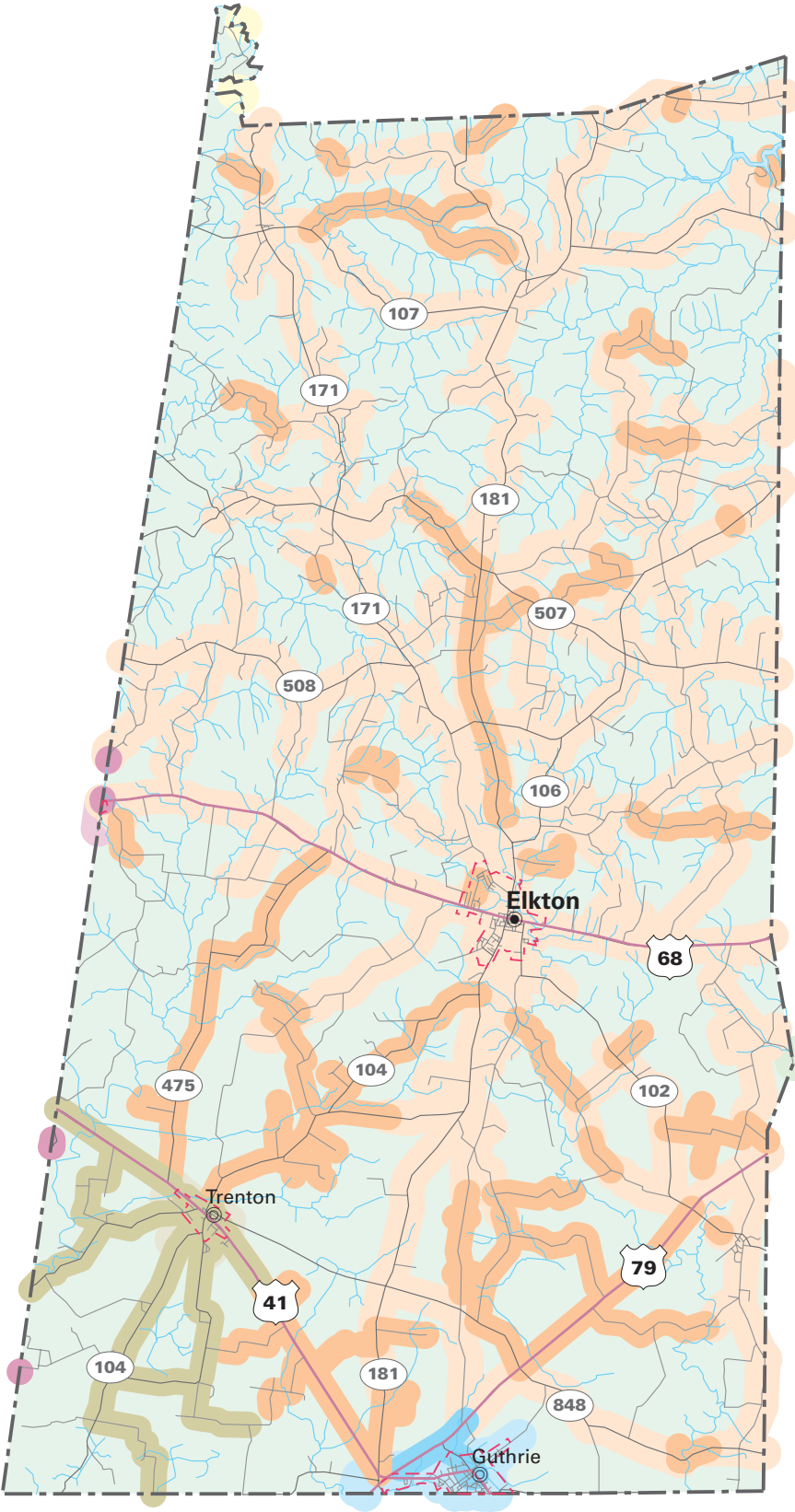
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WATER SERVICE STATUS BY OWNER		
EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		TRENTON WATER WORKS
		TODD COUNTY WATER DISTRICT
		SOUTH LOGAN WATER ASSOCIATION
		PEMBROKE WATER WORKS
		MUHLENBERG COUNTY WATER DISTRICT
		GUTHRIE WATER WORKS
		CHRISTIAN COUNTY WATER DISTRICT



developed a Water Commission that will provide all potable water to every water system in both counties and will take four treatment plants in Todd County out of service. This important project consists of constructing a 10.0 MG/D treatment plant near Guthrie with a raw water line extending into the Cumberland River in Tennessee. This will serve as the sole source of water for both counties.

TODD COUNTY WATER DISTRICT

PWSID: 1100944
System Type:..... COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:..... SETTLES LAKE
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 1.30
Percent Daily Average Production: 49.00
Total Tank Storage Capacity (gallons):..... 520,000.00
Total Service Connections: 2,485.00
Number of Employees:..... 0.00
Treatment Operator Class:
Distribution Operator Class:3A
Customer Rate for 1,000 Gallons:..... 6.77
O/M costs 1997:..... 602,601.00
O/M costs per Service Connection: 248.91
Net Revenue 1997: 28,882.00
Total Water Produced 1997 (gallons):..... 239,259,150.00
Water Sold 1997 (gallons):..... 224,506,036.00
Unaccounted-for Water 1997 (%): 9.53

The Todd County Water District currently operates two water treatment plants. The source of one plant is Lake Settle located in the northern part of the County; the source for the other is a well located in Elkton. The total capacity of both plants is 1,300,000 gallons per day. Neither source of water is adequate to meet local needs, which is why Todd County and Logan County (which also has a supply problem) formed the Logan-Todd Water Commission. The District's plant on Lake Settle serves all of northern Todd and the customers located in south Todd. The source in Elkton, while operated by the District, serves customers in the City of Elkton, but has to be supplemented by water from Lake Settle. Also, due to location and convenience to the Allensville area in southeast Todd County, the District purchases water from the South Logan Water District. Total customers served by the Todd County Water District is 2,485, with 350 located in Logan County.

The District's distribution system is in good condition, with adequate pressures and flows to meet residential needs. Water loss and non-revenue production is just above the 15% mark. Storage consists of four tanks and two clear wells for a total storage capacity of 520,800 gallons.

The Todd County Water Supply Plan indicates slow growth for Todd County through the year 2010. However, there are developments that may create additional growth, i.e., industrial growth in Hopkinsville, Clarksville, Elkton and Guthrie, which will change those forecasts from less than 10% to approximately 20%. Also, because Todd County has a recognized water shortage, the development of the Logan-Todd Water Treatment facility will provide new opportunities for Todd County to attract business and industry

CITY OF ELKTON WATER DEPARTMENT

The City of Elkton's source of water is a well located in the City. The treatment process is composed of pressure sand filters and chlorinators, and is managed by the Todd County Water District. The cost to the City is a very nominal 37 cents per 1,000 gallons. A unique arrangement exists between the City and District, with the District also providing service to the City's distribution system and billing and financial services provided by the City for their customers. The cost for providing maintenance services to the Elkton distribution system is not included in the cost for water, but billed separately for services rendered. The City has 967 customers, with 860 residential households. The distribution system generally is adequate in regard to pressure and volume and, with storage, will improve volume to existing industry located on the west side of the City. Funds for the storage tanks have been approved, and construction is nearing completion. The City's growth is expected to increase due to some success by the City in attracting industry and the completion of the US 68-80 Bypass. The upgrading of this important highway to four lanes will allow workers to live in Elkton and commute to Hopkinsville, Russellville or other industrial centers. This will make the city of Elkton more attractive to those residents looking for the security of a smaller city.

GUTHRIE WATER WORKS

PWSID:..... 1100171
System Type:..... COMMUNITY
Owner Type:..... MUNICIPAL
Surface Source:..... MERIWETHER SPRING
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 0.53
Percent Daily Average Production: 42.00
Total Tank Storage Capacity (gallons):..... 150,000.00
Total Service Connections: 815.00
Number of Employees:..... 1.00
Treatment Operator Class:..... 2D
Distribution Operator Class: 2A
Customer Rate for 1,000 Gallons:..... Not available
O/M costs 1997:..... Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons):..... Not available
Water Sold 1997 (gallons):..... Not available
Unaccounted-for Water 1997 (%): Not available

The City of Guthrie's source of water currently is Merriweather Springs located several miles west of the City. Raw water is pumped from the spring into a water treatment plant located in the City of Guthrie. As a city developed around the railroad, many of the lines were installed to accommodate the railroad in the 1920's and then converted for use by the City. The treatment plant has a capacity of 432,000 gallons per day and has some excess capacity. However, the spring during dry spells has been dangerously low; for that reason, Guthrie will do away with treatment and purchase all their water from the Logan-Todd Regional Water Commission. The City's distribution system has many problems with volume and pressure. Many of the distribution lines are too small, leak or break, and cannot be located due to a system never accurately mapped. Water loss and non-revenue production exceeds 40% due to the problems that are associated with old cast iron and steel water lines. The City is continuously repairing and replacing lines but, as in most areas, funds are limited to make the necessary renovations to the distribution system. Guthrie, with its location near Clarksville and I-24 will experience more growth than what is projected by the Water Supply Plan. With the installation of a natural gas system and the work to eliminate the flooding of some areas of the City, Guthrie will be attractive for more residential growth. Currently, the City has 828 customers with 778 residential households.

TRENTON WATER WORKS

PWSID: 1100428
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source:
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.20
Percent Daily Average Production: 41.00
Total Tank Storage Capacity (gallons): 150,000.00
Total Service Connections: 300.00
Number of Employees: 1.00
Treatment Operator Class: 1D
Distribution Operator Class: 2A
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The residents of Trenton receive their water from 3 wells located within the corporate limits of the City. During heavy rains when the wells receive an influx of silt, which is discharged in the many sinkholes in the area, the plant has difficulty handling it. It contaminated the treated water, requiring boil water warnings. The treatment plant has a capacity of 200,000 gallons per day. Trenton serves 309 customers with 297 residential households.

The distribution system has similar problem as Guthrie, only more so. Water loss at times exceeds 50%; both water storage tanks require repairs and repainting; and many of the water meters are inoperable. Funds to make the necessary repairs are not available by the City, and the system must be upgraded before the Logan-Todd Water Plant come on line.

The City has had residential growth due to their location and proximity to I-24, Clarksville, Tennessee, and Hopkinsville.

OTHER SYSTEMS

SHADY SPRINGS GOLF COURSE

Shady Springs Golf Course is located in Todd County. The system serves a population of 30 and has 1 service connection. The private, transient non-community system has treatment capacity of 12,000 gallons per day. The water source is wells.

PRIVATE DOMESTIC SYSTEMS

About 550 people in Todd County rely on private domestic water supplies: 450 on wells and 100 on other sources.

In the southern half of Todd County more than three-quarters of the drilled wells in the uplands are adequate for a domestic supply. Yields as high as 50 gpm have been reported from wells penetrating large solution channels. In the low-lying areas of the Elk and West Forks of the Red River and along Spring Creek, most wells are inadequate for domestic use unless the well intercepts a major solution opening in the limestone in which the yield could be very large. Ground water in the northern half of the county is not as prevalent as in the southern half of the county. Most wells in the northern half of the county are inadequate for a domestic supply. Some wells in sandstone formations yield enough water for a domestic supply.

Springs with flows ranging from a few gallons per minute to 3,000 gpm are found in the county. Minimum flow generally occurs in early fall, maximum flows in late winter.
